

ABSTRACT OF THE DISCLOSURE (Currently Amended)

Method of identification and quantitative analysis of alcohol(s) alcohols in a sample by mass spectrometry using stable isotope labeled internal standards is provided. Stable isotope internal standards are prepared by reaction of an authentic sample of the alcohols with a stable isotope labeled reagent, and is added to a sample containing said containing the alcohols. The alcohols in the sample mixture are then quantitatively converted to a chemical compounds of identical structure, except the stable isotope atoms, as those of the synthesized stable isotope labeled internal standards using a non-labeled reagent. The sample mixture is then extracted and the extract is analyzed by mass spectrometry. Identification and quantification of alcohols are made from a plot of ion ratio of the converted alcohol chemical compounds to the stable isotope labeled internal standards versus alcohol concentration.